New information on the nest and eggs of Long-billed Tetraka Bernieria madagascariensis

Marcel Achille Ratsaralasy

Nouvelles données sur le nid et les œufs du Tétraka malgache *Bernieria madagascariensis*. Le Tétraka malgache *Bernieria madagascariensis* est un passériforme commun mais peu connu de la famille malgache endémique Bernieridae. Un nid a été observé le 10 novembre 2013 dans la forêt d'Ambatovy, district de Moramanga, à 1.075 m d'altitude, dans la partie ouest de la zone de conservation de l'exploitation minière de Ambatovy Minérals S.A. Le nid en forme de corbeille cylindrique était situé à 120 cm au-dessus du sol, avait un diamètre interne de 10 cm et une profondeur de 8 cm, et contenait deux œufs blancs tachetés de brun et de rouge.

The family Bernieridae, commonly known as tetrakas or Malagasy warblers, is endemic to Madagascar. It comprises 11 species, currently treated in eight genera, based on morphology: *Xanthomixis, Bernieria, Oxylabes, Crossleyia, Hartertula, Thamnornis, Randia* and *Cryptosylvicola*; all these genera are monospecific except *Xanthomixis* which contains four species. They were recognised as a monophyletic group, and a family, only with the advent of DNA analysis in the 1990s (Cibois *et al.* 2001, 2010, Raherilalao & Goodman 2011, Safford & Hawkins 2013). Most are common in certain forest types, but despite this abundance knowledge of their biology is very patchy.

The type genus of the family, *Bernieria*, contains a single species, Long-billed Tetraka *B. madagascariensis*, although there is evidence

for cryptic speciation (N. Block in Raherilalao & Goodman 2011, Safford & Hawkins 2013). Bernieria is a robust, green-and-yellow understorey passerine superficially resembling a greenbul of the genus Phyllastrephus, in which it was long placed. It is common in rainforest and western deciduous forests, and is not considered threatened. Given its abundance and often conspicuous habits, the species' breeding biology is surprisingly poorly known, with no detailed descriptions available. However, at least 20 eggs exist or have existed in museum collections, and brief notes and photographs of two nests indicate that it is a cup suspended between twigs (Hawkins & Sartain 2013). In the east, eggs appear to be laid between August and February or March, but perhaps especially in November-January; in the west the season may be more protracted. However,



Figure 1. Nest of Long-billed Tetraka *Bernieria madagascariensis* in a *Helichrysum* sp., Ambatovy, Madagascar, 10 November 2013 (M. A. Ratsaralasy)

Nid du Tétraka malgache *Bernieria madagascariensis* dans un *Helichrysum* sp., Ambatovy, Madagascar, 10 novembre 2013 (M. A. Ratsaralasy)



Figure 2. Eggs of Long-billed Tetraka *Bernieria madagascariensis*, Ambatovy, Madagascar, 10 November 2013 (M. A. Ratsaralasy)

Œufs du Tétraka malgache *Bernieria madagascariensis*, Ambatovy, Madagascar, 10 novembre 2013 (M. A. Ratsaralasy)



Figure 3. Long-billed Tetraka *Bernieria madagascariensis* incubating, Ambatovy, Madagascar, 10 November 2013 (M. A. Ratsaralasy)

Tétraka malgache *Bernieria madagascariensis* en train de couver, Ambatovy, Madagascar, 10 novembre 2013 (M. A. Ratsaralasy)

available information is sufficiently limited that any additional data merit reporting (R. J. Safford pers. comm.).

In November 2013, with colleagues from Asity Madagascar, I undertook field work in the forested 'conservation zone' of the Ambatovy mining site, near the town of Moramanga in eastern Madagascar. The forest is somewhat disturbed and consists of a mosaic characteristic of the transition between mid-altitude and upper montane forest (Dickinson & Berner 2010). On 10 November, we found a nest of Longbilled Tetraka at an altitude of 1,075 m at c.18°49'S 48°17'E. The habitat immediately around the nest was primary forest with large trees and shrubs on gently sloping ground (5% gradient). The nest tree was adjacent to a trail. The nest was basket-shaped, sited 1.2 m above ground, attached to and supported by a branch (diameter 15 cm) of a Helichrysum sp. (Compositae) shrub, which was 1.8 m tall with a diameter at breast height of 15 cm (Fig. 1). The principal nest material was small twigs. The nest's internal diameter was 10 cm and internal depth 8 cm. It contained two eggs with brown and red speckles on a white background (Fig. 2); these were being incubated at the time of observation by what appeared to be a female (based on short bill length, which differs markedly between the sexes: Hawkins & Sartain 2013; Fig. 3).

Circumstances did not permit followup observations. All details observed were consistent with the previous, very limited, data. The discovery of a nest in relatively accessible forest, beside a trail, in November when much field work takes place in Madagascar's humid forest, adds to the sense of surprise at the great rarity of other such observations. Similarly, the nesting behaviour of the also abundant Spectacled Tetraka *Xanthomixis zosterops* was almost unknown until the work of Temba *et al.* (2014).

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References

Cibois, A., Slikas, B., Schulenberg, T. S. & Pasquet E. 2001. An endemic radiation of Malagasy songbirds is revealed by mitochondrial DNA sequence data. *Evolution* 55: 1198–1206.

Cibois, A., Davis, N., Gregory, S. M. S. & Pasquet, E. 2010. Bernieridae (Aves: Passeriformes): a family group name for the Malagasy sylvioid radiation. *Zootaxa* 2554: 65–68.

Dickinson, S. & Berner, P. O. 2010. Ambatovy project: mining in a challenging biodiversity setting in Madagascar. *Malagasy Nature* 3: 2–13.

Hawkins, A. F. A. & Sartain, A. 2013. Long-billed
Tetraka *Bernieria madagascariensis*. In Safford, R. J. & Hawkins, A. F. A. (eds.) *Birds of Africa*. Vol. 8.
London, UK: Christopher Helm.

Raherilalao, M. J. & Goodman, S. M. 2011. *Histoire*Naturelle des Familles et Sous-familles Endémiques
d'Oiseaux de Madagascar. Antananarivo: Association
Vahatra.

Safford, R. J. & Hawkins, A. F. A. (eds.) 2013. *Birds of Africa*. Vol. 8. London, UK: Christopher Helm.

Temba, E. M., Cabeza, M. & Andrianarimisa, A. 2014. Breeding biology and reproductive success of the Spectacled Tetraka *Xanthomixis zosterops* (Bernieridae) in a rainforest of Madagascar. *Ostrich* 85: 119–123.

Asity Madagascar, Lot IAB 39 ter C Andrononobe, 101 Antananarivo, Madagascar. E-mail: achille.rat@voila.fr

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